

CITY OF SAN ANTONIO



SAN ANTONIO FIRE DEPARTMENT FIRE PREVENTION DIVISION OFFICE OF THE FIRE MARSHAL

TO:

All San Antonio Fire Department Customers

SUBJECT:

FIRE MARSHAL BULLETIN: FB1201

Hazardous Material Storage and Use in Existing Buildings or Facilities, 2009 International Fire Code, *Effective March 1, 2012-2012 International Fire*

Code

DATE:

January 2, 2012

Introduction:

The San Antonio Fire Department (SAFD) has developed the following bulletin to clarify the requirements of the 2009 Edition of the *International Fire Code* (the 2012 International Fire Code shall be effective March 1, 2012) as they pertain to hazardous material storage and use in existing buildings and facilities.

Note: Effective March 1, 2012, the provisions of the 2012 International Fire Code shall apply and previous references to the 2009 IFC Chapter 27- Hazardous Materials-General Provisions shall refer to the reorganized 2012 IFC's Chapter 50-Hazardous Materials-General Provisions.

Definition:

Hazardous materials are defined as such in the **2009 International Fire Code** (Section 2702.1) as chemicals or substances which are physical hazards or health hazards as classified in Chapter 27, whether the materials are a usable or waste condition. Further explanation and clarification of hazard categories can be found in the **2009 IFC** appendix E. These categories are based upon the U.S. Department of Labor Title 29 of the Code of Federal Regulations (DOL 29 CFR).

Requirements:

All buildings or facilities in the City of San Antonio where hazardous materials are stored, used or handled are required to comply with the provisions of the 2009 International Fire Code, Chapter 27, HAZARDOUS MATERIALS-GENERAL PROVISIONS. Existing buildings and facilities in compliance with the requirements of the International Fire Code must have an accurate and updated Occupancy Classification Letter (OCL) available on site at the time of inspection. Existing buildings and facilities are permitted to comply with the 2009 IFC Section 2701.3 Performance-based design alternative as an alternative to compliance with the other requirements in Chapter 27 or as set forth in Chapters 28 through 44. The details of the design alternative are subject to approval by the fire code official.

Facilities utilizing the performance based design alternative report as a method of code compliance must include the analysis of the building or facility as described in the 2009 IFC Section 2701.3.3 and as such shall summarize:

- 1. The properties of the hazardous materials
- 2. The reliability of equipment and operations
- 3. Safeguards for the prevention of unintentional reaction or release
- 4. Spill mitigation
- 5. Safeguards for the control of ignition hazards
- 6. Protection of the hazardous materials from exposure to fire or physical damage
- 7. Exposure hazards
- 8. The detection of gas or vapor release
- 9. Reliable power source
- 10. Ventilation
- 11. An analysis of process hazards
- 12. A pre-startup safety review
- 13. Operating and emergency procedures
- 14. A written plan for the management of change
- 15. A thorough emergency plan
- 16. Accident procedures
- 17. Consequence analysis
- 18. Safety audits
- 19. Compliance and inspection reports by any state, federal, or local agencies to include but not limited to: State Fire Marshal's Office, Occupational Safety and Health Administration (OSHA), Texas Commission on Environmental Quality (TCEQ), Environmental Protection Agency (EPA), American Petroleum Institute (API), San Antonio Water System (SAWS), etc.

The building or facility shall also submit as part of the report:

Hazardous Material Management Plan (HMMP) including the following:

- 1. Access to each storage and use area
- 2. Location of emergency equipment
- 3. Location where liaison will meet emergency responders
- 4. Facility evacuation and meeting point locations
- 5. The general purpose of other areas within the building
- 6. Location of all above-ground and underground tanks and their appurtenances including, but not limited to, sumps, vaults, below-grade treatment systems and piping.
- 7. Hazard classes in each area
- 8. Locations of all control areas and Group H occupancies
- 9. Emergency exits

Hazardous Material Inventory Statement (HMIS)

Acceptable reports are SARA (Title III), Tier II reports and/or detailed **Occupancy Classification Letters (OCL)** normally submitted to COSA for review and approval. The reports shall include, at a minimum:

- 1. Product name
- 2. Component
- 3. Chemical Abstract Service (CAS) number
- 4. Location where stored or used
- 5. Container size

- 6. Hazard classification
- 7. Amount in storage
- 8. Amount in use-closed systems
- 9. Amount in use-open system

Other Permits and Inspections:

➤ San Antonio, Texas, Code of Ordinances, Part II – CODE, Chapter 16 – LICENSES AND BUSINESS REGULATIONS, ARTICLE 1. – IN GENERAL, <u>Section 16-3.</u> – Application/permit fee for facilities using hazardous materials; response fee based on materials and man-hours required at scene of accident.

The City of San Antonio adopted ordinance 72267 on September 13, 1990 to be effective January 1, 1991 establishing an annual permit fee on every person or corporation that owns, operates, or acts as the agent for any business location where one or more hazardous materials are used, stored, transported, manufactured, generated, disposed or sold within the city. The fee is based on the amounts for the quantities of chemical listed in table 1 of the ordinance. The fee is also based on the largest amount (in pounds) of a single type of hazardous material, not cumulative. The current minimum fee "HAZMAT FEE" of \$70.00 is based on 100 pounds of any given hazardous material with a maximum set at \$3,320.00 for any single hazardous material of 100,000,000 pounds or greater.

NOTE: All buildings and facilities currently paying the "HAZMAT FEE" are still required to comply with the provisions of the 2009 International Fire Code as described in this bulletin.

- The City of San Antonio Fire Department requires the annual Hazardous Material Permit for all facilities that have store or use hazardous materials in excess of 100 pounds. All permitted storage tanks of flammable and combustible liquids shall require a hazardous material permit. Hazardous material permit application can be found on line at www.sananonio.gov/safd
- San Antonio, Texas, Code of Ordinances, Part II CODE, Chapter 11 Fire Prevention Code, Article II. FIRE DEPARTMENT, <u>Section 11-16</u> Fees for certain permits and services.
 - The City of San Antonio Fire Department requires a permit for the installation of any above ground tank in excess of 60 gallons, or any underground storage tank, used for the storage of any flammable liquid, combustible liquid, or hazardous material.
 - Facilities that currently do not have record of tank installation permits must submit a full report containing detailed tank specifications to the *Fire Code Official* for review and approval. Tank permit applications must be submitted as "EXISTING TANKS" including all necessary fees. (Exception: Fee is waived for facilities currently complying with SAFD HAZMAT Enforcement Division provisions as of November 1, 2011.)

- All Aboveground Tanks storing Flammable and Combustible Liquids (Class I, II, or IIIA) for a period lasting longer than one year must meet the definition of a Protected Aboveground Tank as per NFPA 30 and constructed in accordance with UL2085.
- Construction sites can apply for a temporary tank permit lasting up to one year.
- Temporary Tanks must meet minimum ANSI/UL142 specifications.
- All tanks must be listed for their specific uses.

Additional Definitions and Notes:

- FIRE PREVENTION CODE AMENDMENTS SECTION 11-35: Storage of flammable or combustible liquids in outside aboveground tanks is prohibited unless authorized by the Fire Chief or his designee.
- ➤ NFPA 30 defines an Aboveground Tank as: A storage tank that is installed above grade at grade, or below grade without backfill.
- ➤ 2009 International Fire Code section 3404.2.7 Design, construction and general installation requirements for tanks. The design, fabrication and construction of tanks shall comply with NFPA 30. Each tank shall bear a permanent nameplate or marking indication the standard used as the basis of design.
- ANSI/UL 2085, Standard for Protected Aboveground Tanks for Flammable and Combustible Liquids
- ➤ NFPA 30 Protected Aboveground Tank: an atmospheric aboveground storage tank with integral secondary containment and thermal insulation that has been evaluated for resistance to physical damage and for limiting the heat transferred to the primary tank when exposed to a hydrocarbon pool fire and is listed in accordance with ANSI/UL 2085, Standard for Protected Aboveground Tanks for Flammable and Combustible Liquids, or an equivalent test procedure.
- ➤ NFPA 30 section 3.3.47.7 Storage Tank: Any vessel having a liquid capacity that exceeds 60 gallons and is intended for fixed installation, and is not used for processing.
- ➤ NFPA 30 section 3.3.47.5 Portable Tank. Any vessel having a liquid capacity over 60 gallons intended for storing liquids and not intended for fixed installation
- ➤ ANSI/UL 142, Standard for steel Aboveground Tanks for Flammable and Combustible Liquids
- ➤ NFPA 30 Section 1.4.2 "In those cases where the authority having jurisdiction determines that the existing situation presents an unacceptable degree of risk, the authority having jurisdiction shall be permitted to apply retroactively any portion of this code deemed appropriate. Existing tanks involving a distinct life hazard to life or adjacent property, and as referred to in NFPA 30 section A1.4.2 must be removed immediately."

Please direct all questions to the Fire Prevention Division at 210-207-8410

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